TWO TIER CLUSTERS FOR REPRESENTATION OF OBJECTS IN JAVA PROGRAMMING ENVIRONMENTS

ABSTRACT OF THE DISCLOSURE

5   Improved techniques for representation of objects in a Java programming environment are disclosed. The techniques are highly suitable for representation of Java objects inside virtual machines, especially those that operate with limited resources (e.g., embedded systems. A cluster of Java object representations is disclosed. Each of
10   the Java object representations provide a reference to a Java object and a reference to the class associated with the Java object. Accordingly, a two-tier representation is provided which allows efficient implementation of applications which need to access information regarding both Java objects and classes. This means that the processing required to perform
15   applications such as garbage collection is reduced. In addition, one of the references in the two-tier representation can be implemented to provide direct access to the internal class representation associated with the object. As a result, quick access to information regarding Java objects can be achieved. Thus, performance of the virtual machines, especially those
20   operating with relatively limited resources, can be improved.